

5.5 Worksheet

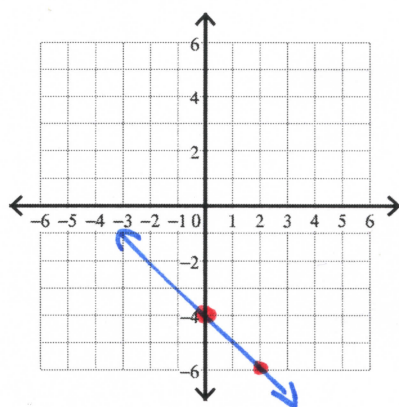
Period: _____ Date: _____

To graph either: 1) Solve for y then use **m** and **b**. or 2) Use the tricks! $m = \frac{-A}{B}$, $b = \frac{C}{B}$

1.) $x + y = -4$

$$\begin{array}{r} -x \\ -x + y = -4 \\ \hline y = -x - 4 \end{array}$$

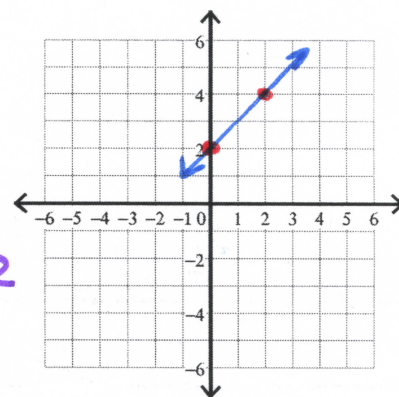
$m = -\frac{1}{1}$ $b = -4$



2.) $x - y = -2$

$$\begin{array}{l} A = 1 \\ B = -1 \\ C = -2 \\ m = \frac{-1}{-1} = 1 \\ b = \frac{-2}{-1} = +2 \end{array}$$

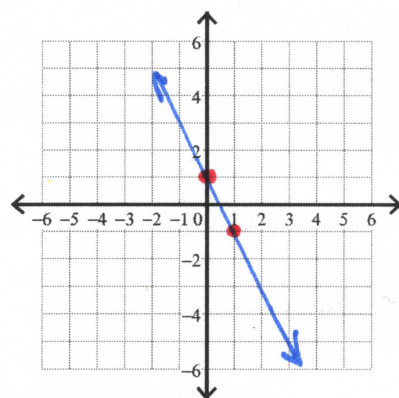
$m = +$ $b = +2$



3.) $2x + y = 1$

$$\begin{array}{r} -2x \\ -2x + y = 1 \\ \hline y = -2x + 1 \end{array}$$

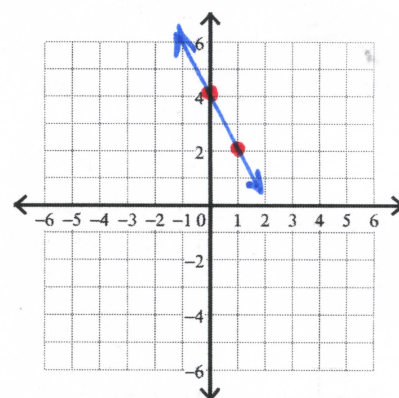
$m = -\frac{2}{1}$ $b = +1$



4.) $2x + y = 4$

$$\begin{array}{l} A = 2 \\ B = 1 \\ C = 4 \\ m = \frac{-2}{1} = -2 \\ b = \frac{4}{1} = 4 \end{array}$$

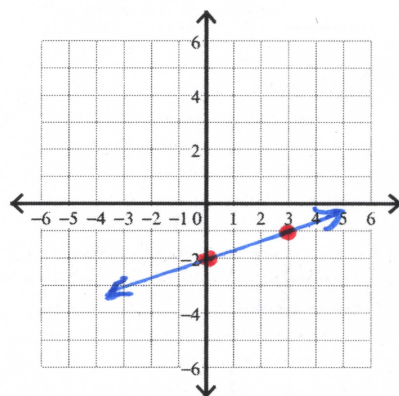
$m = -\frac{2}{1}$ $b = +4$



5.) $x - 3y = 6$

$$\begin{array}{r} -x \\ -x - 3y = 6 \\ \hline -3y = -x + 6 \\ \div -3 \quad \div -3 \quad \div -3 \\ y = \frac{1}{3}x - 2 \end{array}$$

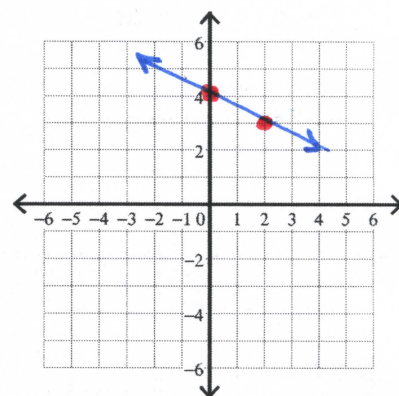
$m = \frac{1}{3}$ $b = -2$



6.) $x + 2y = 8$

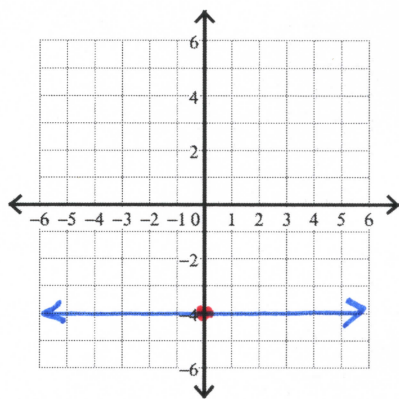
$$\begin{array}{l} A = 1 \\ B = 2 \\ C = 8 \\ m = \frac{-1}{2} = -\frac{1}{2} \\ b = \frac{8}{2} = 4 \end{array}$$

$m = -\frac{1}{2}$ $b = +4$



7.) $y = -4$

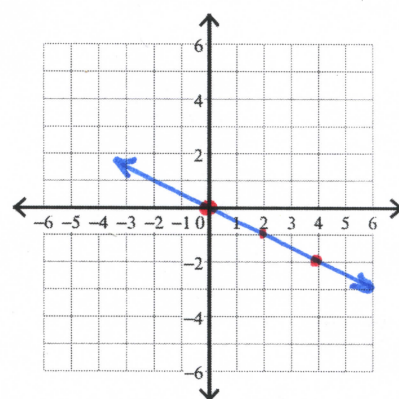
$m = 0$ $b = -4$



8.) $x + 2y = 0$

$A = 1$
 $B = 2$
 $C = 0$
 $m = -\frac{1}{2}$
 $b = \frac{0}{2} = 0$

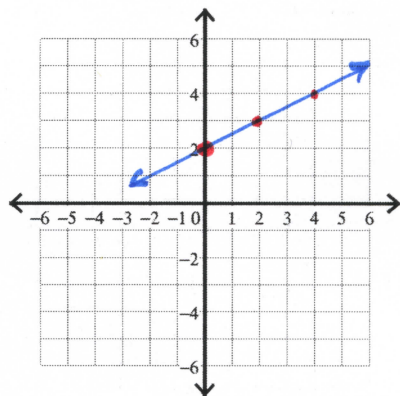
$m = -\frac{1}{2}$ $b = 0$



9.) $x - 2y = -4$

$m = \frac{1}{2}$ $b = +2$

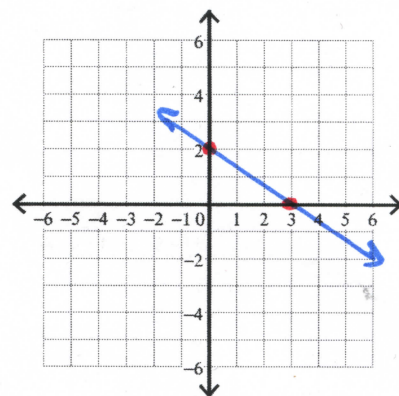
$$\begin{array}{r} -x \\ -2y = -x - 4 \\ -2 \quad -2 \quad -2 \\ \hline y = \frac{1}{2}x + 2 \end{array}$$



10.) $2x + 3y = 6$

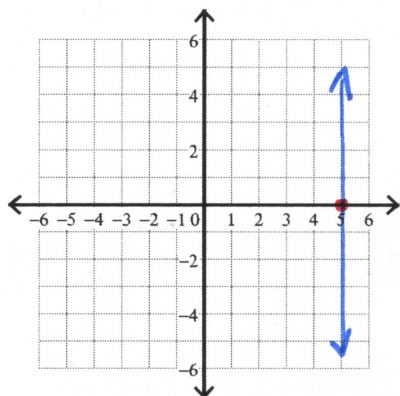
$A = 2$
 $B = 3$
 $C = 6$
 $m = -\frac{2}{3}$
 $b = \frac{6}{3} = 2$

$m = -\frac{2}{3}$ $b = +2$



11.) $x = 5$

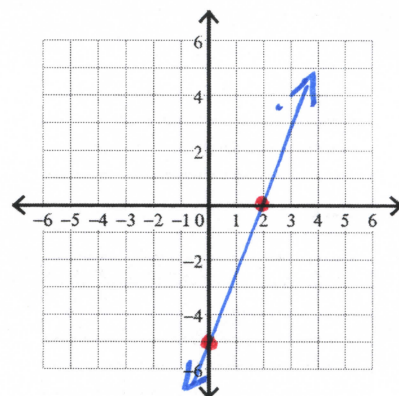
$m = \text{UNDEF}$ $b = \text{NONE}$



12.) $5x - 2y = 10$

$A = 5$
 $B = -2$
 $C = 10$
 $m = \frac{-5}{-2} = \frac{5}{2}$
 $b = \frac{10}{-2} = -5$

$m = \frac{5}{2}$ $b = -5$



13.) Of the following problems, which one was: a) a horizontal line? # 7

b) a vertical line? # 11

14.) Of the two methods to graph lines in standard form, which one do you prefer? Explain why.

$m = -\frac{A}{B}$ $b = \frac{C}{B}$ IT'S EASIER THAN REARRANGING THE EQUATION INTO SLOPE-INTERCEPT FORM.